



Office of the Governor

State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

May 15, 2020

The Honorable Donald J. Trump
President of the United States
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500

Through: Lee dePalo, FEMA Region VIII Administrator

Mr. President:

Under the provisions of Section 401 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §5121-§5207 (Stafford Act), and implemented by 44 CFR §206.36, I respectfully request you declare a major disaster authorizing the full suite of individual and public assistance, temporary housing, and hazard mitigation programs. I specifically request supplemental federal disaster assistance programs available under the Individual and Households Program, Disaster Legal Services, Disaster Unemployment Assistance, Disaster Case Management, and Crisis Counseling Program; as well as necessary administrative and disaster management expenses, for the State of Utah as a result of a major earthquake on March 18, 2020.

The potential scope of the earthquake damage, associated response efforts, and compounding complications to response and recovery due to the timing of the event happening during the critical response to the COVID-19 Pandemic, I declared a State Disaster Emergency on March 20. A State of Emergency for the COVID-19 Pandemic had been previously declared on March 6. The cost and scope of the disaster, compounded by the already strained state and local resources due to the ongoing COVID-19 Pandemic response, is sufficient to warrant federal disaster assistance.

I request the incident period for this disaster start on March 18, 2020, and due to continued aftershocks, end on April 17, 2020. I request that the Major Disaster Declaration include the counties of Salt Lake, Davis and Tooele County. There have been over 2,000 aftershocks, including a M4.2 on both April 14 and 17, causing significant damage to several buildings and forcing the Unified Fire Authority to close their Magna fire station. The Utah Department of Transportation (UDOT) continues to survey pre-identified bridges after every M3.0 aftershock. Seismologists from the University of Utah Seismograph Station (UUSS) and geologists from the Utah Geological Survey (UGS) are in agreement we will continue to see aftershocks for several months, and could potentially have large enough aftershocks to cause continued damage.

Overview

On March 18, 2020 at 7:09 am Mountain Daylight Time, a magnitude 5.7 earthquake occurred about one mile north-northeast of Magna with a depth of 8.8 kilometers producing an estimated VIII Intensity with severe shaking, causing widespread and heavy damage, primarily within Salt Lake County and into Davis, Tooele, and Weber Counties. The United States Geological Survey (USGS) in collaboration with the UUSS recorded over 2,016 aftershocks occurring between March 18 and May 6. The largest aftershocks were two M4.6 events that occurred at 8:02 am and 1:12 pm on Wednesday, March 18. An aftershock of M4.2 was significant enough to cause and exacerbate damage previously recorded on April 14 and 17. There have been 40 aftershocks of M3.0 and larger.

The earthquake and subsequent aftershocks caused widespread power outages, disrupted gas lines, and caused damage to roadways and bridges in some areas of Salt Lake County. There was also severe damage to private homes, personal property, and businesses displacing over 100 people. According to preliminary HAZUS analyses, there is a potential for up to \$62 million in structural building damage and \$629 million in economic loss. Our initial damage assessment has found over \$70 million in public infrastructure damage.

All of the affected communities are located along the Wasatch Front, where over 85 percent of Utah's population is concentrated. Magna, the city closest to the epicenter, has a population of 26,505 according to the 2010 Census and is located approximately 12 miles Northwest of Salt Lake City. Salt Lake City has a population of 186,440, Herriman has a population of 21,785, Tooele City has a population of 31,605, and West Valley City has a population of 129,480 according to the 2010 census. Affected County populations according to 2010 Census, Salt Lake 1,029,655, Davis 306,479, Tooele County 52,218 and Weber 231,236. These contiguous jurisdictions affected by the earthquake comprise over 58 percent or over half of the State's total population and are located in the highest risk/growth/exposure area of COVID-19.

A detailed report conducted by the Earthquake Engineering Research Institute (EERI) "Virtual Earthquake Reconnaissance Team (VERT)" outlines the first 48 hours response to the earthquake and is attached to this request.

COVID-19 Pandemic - Extraordinary Circumstances

On April 4, 2020 Utah received a federal disaster declaration for COVID-19, DR4525. This followed a nationwide federal emergency declaration for COVID-19 granted on March 13, 2020, and the "Stay Home, Stay Safe" directive I initiated for Utah in response to the rapidly spreading coronavirus outbreak on March 27, 2020. As of May 12, 22 counties, 36 cities, and five tribes have declared local states of emergency for the COVID-19 Pandemic and 68 Utahns have died.

The Magna earthquake occurred on March 18, 2020, the week following the initial federal declaration for COVID-19, and during a high response period at the beginning of an undetermined continuing crisis. The timing of the earthquake in peak pandemic conditions has not only compounded earthquake response and recovery efforts, but placed additional financial and emotional strain on already overburdened communities and individuals.

Social distancing requirements have made it difficult to complete damage assessments and response efforts in a timely manner. Understanding the limits of obtaining quick and accurate damage information from earthquake events in non-pandemic situations, and foreseeing the additional difficulties under pandemic conditions, the State of Utah requested and was granted a 30 day time extension for the disaster declaration request process.

Delays in accessing and assessing buildings closed prior to the earthquake due to COVID-19, a public lack of understanding of and experience with earthquake damage types and severity, and residents hesitancy to report damage for fear of being removed from their homes, have all contributed to delays in damage assessments and questions of full reporting. We expect reports of damage to continue for several months as inspections are completed and previously unknown damages are discovered, understood, or compounded over time.

COVID-19 has dominated the media and news coverage, exhausted state and local resources, and depleted social and voluntary agency services - exacerbating and overshadowing the needs of those affected by the earthquake. COVID-19 has impacted the State's ability to fully focus its resources and respond to communities and residents impacted by the earthquake, as it would be able to in non-pandemic conditions. Businesses and residents, already depleted - both financially and emotionally - from the pandemic shut downs, now face the trauma and expense of recovering from an earthquake disaster with little to no reserves, and State and local governments already strained and depleted of extra resources.

COVID-19 has brought record unemployment numbers, shuttered businesses, restricted recreation and social interactions, increased domestic violence issues, high levels of stress and anxiety, and overburdened social service programs. Voluntary organizations are reduced in funding and capacity as they stretch to meet unprecedented need, while resource strained governments prepare to close programs and lay off workers due to local tax and revenue loss.

The State of Utah will always do its best to assist local governments, businesses, and residents in times of crisis. While the Magna earthquake may have been a challenge within the response and recovery capabilities of State and local governments in non-pandemic circumstances, the disaster within a disaster of the earthquake occurring in the heart of the COVID-19 response presents extraordinary circumstances; depleting state and local resources and leaving affected communities and residents in need of federal disaster recovery assistance.

State and Local Actions

Immediately following the earthquake, the State Emergency Operations Center (SEOC) was activated to a Level 1 from a Level 2 for the COVID-19 incident. The SEOC remains at Level 1 to continue response efforts to the COVID-19 Pandemic as well to support recovery and damage assessment efforts for the earthquake. Salt Lake County and Tooele County restructured their already activated EOCs to respond to the earthquake in addition to COVID-19. The State of Utah, Salt Lake County, Salt Lake City, Magna, Herriman and West Valley City all made disaster declarations following the earthquake, in addition to their COVID-19 declarations.

A community-wide power outage affected more than 73,000 residents of the region immediately after the earthquake, all but 3,000 were back online by the end of the day and full service was restored to all homes and businesses by Thursday, March 19. Sprint reported a handful of cell sites out of service and running on battery back-up following the earthquake and power outages. Generators were deployed to the sites and disruptions of service were minimal as most users were still able to get a signal using their phones' roaming feature. Dominion Energy received approximately 400 requests for service disruptions as a result of the earthquake and worked to repair gas line ruptures across Davis and Salt Lake Counties in the days following the earthquake.

UDOT mobilized their Structures Division to perform earthquake damage inspections on 715 bridges in Salt Lake, Tooele, and Davis Counties. The Structures Division inspection teams consisted of UDOT Nationally Certified Bridge Inspectors, UDOT Structural Engineers, and Consultant

Nationally Certified Bridge Inspectors. We had up to 14 teams of 2 - 3 personnel deployed. The 715 initial inspections were completed by midday on March 20th.

After each M3.0 or higher earthquake, maintenance personnel performed follow up inspections on all bridges classified in yellow condition or worse. If it was suspected that there was additional damage, a Structures team performed a follow up inspection.

On March 19th, deficiencies were identified on the ramp from Union Park Avenue northbound onto I-215 westbound that required closure of the bridge. The bridge was closed immediately. On March 21st an in-depth inspection was completed to provide testing of the superstructure pins to verify potential defects. No defects to the pins were found during this inspection. On March 22nd a combination of Region and Structures personnel performed a repair to the bridge expansion joint and the bridge was reopened. This was the only bridge that was closed in relation to the earthquake, and the only impact to the traveling public from a bridge standpoint.

After the initial evaluations were complete 1 bridge was classified in red condition (closed) and 17 bridges were classified as yellow condition (damage noted). In the following two weeks, in-depth inspections were completed on all of the bridges with damage noted to determine if repairs were needed. Following these inspections, eight bridges were identified as needing repairs. Initial projects are currently in design to develop plans for the repairs to be performed.

Electric power to TRAX, Utah Transit Authority's (UTA) light rail system, was interrupted. There were temporary mass transit disruptions to Frontrunner and TRAX systems while rail lines were investigated for safety. Most rail lines were operational within 24 hours, and all major transportation corridors with severe damage reopened within days of the earthquake.

A water main break at Salt Lake International Airport closed all operations for six hours. The airport also evacuated its main flight tower to ensure the safety of the tower and allow earthquake damage inspections. All air traffic was diverted to one runway forcing the airport to operate at reduced capacity allowing 20 planes to land and take off per hour (normal operating standards are 80 flights an hour). In the interim, the airport utilized a temporary flight tower until the necessary repairs could be made and the airport resumed full operations on March 20. On March 18, Red Cross provided mass care resource support (cots, blankets, comfort kits) to 40 international travelers at the Salt Lake International Airport who missed connections or had flight cancellations due to decreased airport operations following the earthquake. The cost to close the airport for six hours and reduction of services is still yet undetermined and won't be known for several more months but runs into the millions.

All schools in the Salt Lake, Tooele and Davis County School Districts were evacuated until safety inspections could be conducted. Schools had already been moved to distance learning due to COVID-19 but school lunch and feeding operations, as well as distance learning equipment distribution, were still ongoing at the time of the earthquake, and were suspended until buildings could be evaluated.

UGS provided geologic emergency response to the earthquake and the subsequent aftershocks by activating its EOC, set up their digital clearinghouse, sent two field teams to investigate geologic effects, and responded to multiple inquiries from the public and other agencies.

The digital clearinghouse was established to enable a single archival location of geologic and related data on the earthquake and aftershock sequence. This data is used for post-event research into earthquake effects, in the performance evaluation of infrastructure, and in evaluating the performance of building codes, material types, and construction methods to reduce the impact and effects from

future earthquake events. In addition, via a social media campaign, the UGS solicited photographs and videos of earthquake damage and reactions to the earthquake from the public.

Two field teams provided reconnaissance of geologic effects from the earthquake, including liquefaction features along the Jordan River and the shores of Great Salt Lake near the Great Salt Lake Marina and potential rockfall along the front of the Wasatch Range. This time-sensitive information is often lost if not collected soon after an event, due to urban cleanup and other activities, particularly if the geologic features are small.

Dominion Energy received approximately 400 requests for service disruptions as a result of the earthquake, leading to utility shutoffs and the displacement of over 100 people. As of May 13, 2020 there are still 15 - 20 families displaced in West Valley City as their mobile homes are uninhabitable and it isn't safe for Dominion Energy to restore natural gas to the damaged properties. A community-wide power outage affected more than 73,000 residents of the region immediately after the earthquake, with full service restored to all homes and businesses by Thursday, March 19. Damages to water and sewer lines are likely to be delayed and reports of yet unknown damages are expected to continue for several weeks to months, if not longer.

Tooele City has received significant damage to a police station and other city buildings. Tooele County opened their EOC and started conducting assessments on all of their buildings.

Severe damage to many older structures on Magna Main Street with demolition permits for a few structures authorized.

In Salt Lake County public facility and infrastructure damage inspections and loss estimates show 107 structures impacted with an estimated loss of \$48.4 million. Individual and business damage inspections show 570 structures impacted with an estimated loss of \$1.9 million (this number will rise as building damage is validated).

West Valley City partnered with Habitat for Humanity to assess a damaged 229-unit mobile home park where 46 homes were moved off their foundations and an additional 35 were deemed unstable by building inspectors, with over 100 residents displaced due to gas line disruptions. Due to COVID-19 pandemic conditions, mass sheltering wasn't the best option for many displaced families, who were also hesitant to stay with friends or family. The Red Cross provided some residents displaced by the earthquake with temporary housing and assisted them in finding long-term alternative housing. West Valley City prioritized a project to help lift and reset the 46 mobile homes that were shifted off their foundations but were repairable. Dominion Energy restored gas service to most units. To date, 61 damaged mobile homes have been deemed occupiable - 7 of those from the 46 originally off their foundations. Concern remains about the remaining damaged or unstable units that have yet to be repaired.

More than 8,000 gallons of hydrochloric acid leaked from a damaged tank at a Kennecott Utah Copper mining, smelting and refining facility in Magna following the earthquake. Most of the chemical was contained to a catch basin in the facility, but a chemical plume flowed north over the Great Salt Lake. The Unified Fire Authority and Utah National Guard responded with concerns the plume would shift with the wind and head back south over the populated town of Magna, potentially affecting public health. Utah Highway Patrol closed down SR 201 from UT-202 to 8400 W while crews worked to clean up the spill. Fortunately, the chemical spill plume dissipated over the Great Salt Lake and the public wasn't negatively impacted, but the Immediate Response Unit continued to monitor the air quality until the risk was eliminated.

Mitigation Efforts

Utah has worked to prepare for earthquakes through taking mitigation measures. The Salt Lake City and County building was first retrofitted in 1989 and is currently updating their retrofit, this building received over \$6 million in damages from the earthquake but far less than if nothing had been done. The State Capitol building was retrofitted in the 2000's and received no damage. The State Division of Emergency Management (DEM) who oversees the hazard mitigation program has worked tirelessly in obtaining seismic retrofit grants through FEMA. Fire stations, libraries, water treatment plants and other public buildings have been retrofitted through Hazard Mitigation Assistance (HMA). Between 2003 and 2018, DEM secured over \$25 million in PDM to fund seismic retrofits throughout Northern Utah; this was matched with another \$25 million in local funding to ensure these projects were completed. The State has worked closely with Salt Lake City in developing their Fix The Bricks program that provides HMA grant funding to homeowners to assist in retrofitting their Unreinforced Masonry (URM) homes. DEM is currently working with FEMA to expand this program outside of Salt Lake City and beyond single family homes.

The State is currently working closely with FEMA on developing the Wasatch Front Unreinforced Masonry Risk Reduction Strategy. This Strategy was the outcome of a 2019 URM Summit sponsored by FEMA that brought together engineers, geologists, emergency managers, architects and government officials to address URM buildings. From this Summit, Utah requested FEMA assist with developing a Strategy and Outreach Campaign through the National Mitigation Investment Strategy. The Strategy is expected to be completed by the fall of 2020 and we look forward to implementing many of the actions to continue mitigating our risks.

Request Specifics:

Public Assistance

I believe the severity, magnitude, and impact of this disaster meets the factors outlined in 44 CFR §206.48(6)(a) for Public Assistance.

Damage Assessment

Due to the COVID-19 Pandemic, stay at home orders, inspectors being quarantined and the State restricting staff travel, the Preliminary Damage Assessments (PDA) were conducted very differently than normal. COVID-19 activities significantly impacted the damage assessments and made all assessments more complicated and much longer than anticipated. The State started working with local communities on damage assessments days after the earthquake in providing guidance. The FEMA/State Joint PDA was started April 1 and ran through May.

All of the assessments were completed virtually by the State and FEMA with no onsite inspections. The State worked with the locals on gathering engineering reports where they were able to gather them, insurance adjusters reports, Task Force One inspections and self-reporting by the entity. All information was sent by email to FEMA Region VIII for review and verification.

The State gathered all of the damage assessment information we were able in time to meet the deadline. Due to the COVID-19 and nature of earthquake damages, the estimates are incomplete and not all of the damages were verified by Region VIII due to lack of information and the time to gather everything that was needed. The State continues to get updated costs and new damage reports as we are preparing this request. In discussions with other earthquake states, we know much of the cost is unknown until repairs are being made, where a small crack appearing to cost a few hundred dollars turns into a multi-million-dollar repair.

According to the HAZUS report based on the Magna earthquake provided by FEMA Region VIII (attached), we expected to see up to \$62 million in structural building damage and \$629 million in economic loss from this event. As damage reports come in and inspections are being completed, we are seeing HAZUS numbers are close to reported damages. All public infrastructure damages reported to DEM is over \$70 million in Salt Lake and Tooele Counties.

The Joint PA PDA was able to validate the following public assistance damages:

- Category A = \$58,502
- Category B = \$0
- Category C = \$0
- Category D = \$311,500
- Category E = \$17,721,837
- Category F = \$0
- Category G = \$0
- Total Estimated Cost = \$18,132,889

For the Magna Earthquake, Utah's Emergency Operations center accrued expenses of \$13,290.87 for SEOC personnel overtime, \$3,657.70 for website development on the Utah Earthquake website, and \$21,976.18 for building and structural assessments following the main shock as well as the M4.2 aftershock, totaling \$38,924.75 in expenses.

Based on preliminary damage assessments provided by the affected jurisdictions, the State of Utah has determined the total estimated eligible expenses associated with this disaster after insurance adjustments are \$18,132,889 which exceeds the minimum threshold for a major disaster declaration in Utah by \$13,904,144.95. The minimum statewide per capita threshold required by the Stafford Act of \$4,228,744.05, calculated by multiplying 2,763,885 Utah residents (2010 Census) by the Fiscal Year [2020] per capita indicator of \$1.53.

The Utah Division of Risk Management (DRM) administers the State Risk Management Fund (Fund), which provides property casualty coverage for the State's institutions of higher education, school districts, and state agencies across the entire state. About one-half of the State's charter schools are also Fund participants. We verify there will be no duplication between what is covered by insurance and what we request from the federal government.

DRM annually procures excess property insurance with earthquake coverage for its covered entities. This earthquake coverage has limits of \$525 million, with a \$1 million self-insured retention (SIR), or deductible. While there are many insurers on the excess property program, the principal carrier is AIG/Lexington. Additionally, DRM recently procured a parametric earthquake policy from Swiss Re with limits of \$50 million. Payments under the parametric policy are based upon the severity and location (by zip code) of an earthquake, irrespective of actual property damage within each zip code. As a result of the earthquake, Swiss Re has tendered DRM the sum of \$963,750.00 one-time payout. Both the excess property policy and the parametric policy were brokered through Moreton & Company and AMWINS, the Fund's retail and wholesale brokers. This payout will be placed towards our new higher deductible.

To date, DRM has received 152 earthquake claims from its covered entities. Additional quake claims are expected as they are discovered in the coming weeks and months. Most of the damage occurred in Salt Lake County. Among our covered entities, Granite School District experienced the most significant damages. Some of the affected structures sustained significant structural damage, while many only experienced cosmetic damages. We now estimate that total losses from the March 18th

earthquake will reach or exceed \$51 million for buildings covered under DRM. This projection is expected to change as adjusters, covered entities, and engineers complete their damage assessments and we begin to receive repair bids in the weeks ahead. It currently appears that most earthquake-related property losses experienced by our covered entities will be covered by the Fund and the insurance programs described above, with the notable exceptions of per occurrence deductibles and the mitigation/abatement of asbestos, lead paint, and mold.

The State's property insurance is up for renewal on July 1, 2020. In recent conversations with our brokers at Moreton & Company and AMWINS, we have been informed that the premiums on our traditional excess property/quake policy will increase by 15% - 25%, which equates to an annual premium increase of \$2.7 - \$4.5 million. Claim costs associated with the earthquake is a contributing factor to that projected increase.

Salt Lake and Tooele Counties and Salt Lake City have earthquake insurance to cover nearly all of their damages as well. The effect on overall uninsured losses has significantly reduced damage assessments totals and the ability to meet the standard PA dollar threshold requirements. While it is commendable that our state and local governments have taken the initiative to have robust insurance policies, the effect on PA eligibility negatively impacts the remaining uninsured entities and prevents them from receiving the federal assistance they need. The proactive and comprehensive insurance coverage of some should be encouraged and rewarded, but not result in punitive impacts for those communities that still need additional assistance.

State buildings with major damage included in the claims is the Rio Grande in SLC, which houses the Department of Heritage & Arts and the divisions of State History, Multicultural Affairs, UServeUtah, and the Arts & Museums visual and public arts program, and is currently closed. This historic building currently has a cost estimate of \$1.2 million for repairs, but these are early estimates and actual costs are expected to be much higher. The Utah Department of Agriculture and Food buildings sustained water damage and gas leaks and two floors of the State-owned Calvin Rampton building required repairs. The State Department of Alcohol and Beverage Control had a loss of over \$800,000 in supplies and damages to their fire suppression system at their main warehouse. Many of the buildings have cracks, loose joints and seem to have moved apart, the cost to repair these types of damages are unknown until the repair work begins. While most of these damages will be minor, some of them could turn into much larger building costs.

The Utah State Historic Preservation Office (SHPO) conducted extensive fieldwork in Magna and Salt Lake City to compile earthquake damage reports of affected historic buildings. The SHPO has provided a 195-page report that is attached to this request. They identified three historic buildings as being unsafe due to earthquake damages, the Rio Grande, which is a state-owned facility and two private buildings in Salt Lake City, the Jackson Apartments and the CCG Howells building.

Below is a summary of the data broken down from the Historic Building Damage Collector App. The SHPO identified 145 historic buildings from their windshield assessment.

Businesses: 65

Residences: 53

Places of Worship: 16

Apartments: 3

Schools: 3

State-Owned: 2

Historic Other: 2

Local Gov't: 1

Granite School District suffered a loss of over \$51 million with structural damage to West Lake Jr and serious damage to Cyprus High. West Lake Jr is estimated to have \$45 million in damages and the District believes the school is a total loss based on limited engineering due to COVID-19. The District is working with insurance adjusters on replacing the damaged school with a new school. The District believes there could be a \$15 million gap from the insurance settlement and the cost to build a new school. Cyprus High School is estimated to have over \$3 million in damages, initial inspections have not allowed for a full structural inspection of the building. Granite School District reported damages of at least \$3,000 each at 30 school facilities and their maintenance compound.

Several schools have remained closed until repairs can be completed. These closures have not affected daily school attendance, as all Utah schools are currently closed physically for the remainder of the year due to COVID-19, but continued school lunch and equipment distribution operations were interrupted. Because schools were closed for COVID-19, students and teachers were not in the schools at the time of the earthquake and sustained no injuries, an outcome that would have been very different if schools had been open and operating.

Due to limitations from COVID-19, there is an inability to fully gauge the magnitude of the disaster and there are likely a number of schools throughout the state that may have insurance limitations. Inspections by building officials and engineers revealed some damage to two schools in Davis County, South Davis Junior High School sustained damage to an expansion joint and flooring and Clearfield High School also had expansion joint damage. Repairs to the two schools in Davis County are not expected to be completed until summer. The Jordan, Weber and Tooele School districts also received damage to schools, though mostly cosmetic.

While UDOT has over \$2.5 million in damages, this cost will not be covered by FEMA or Federal Highways as it does not meet the requirements for either federal agency. UDOT will have to absorb the majority of their repair costs into their budget that will be cut due to COVID-19.

Individual Assistance

I believe the severity, magnitude, and impact of this disaster, combined with the extraordinary circumstances of the concurrent COVID-19 pandemic, meets the factors outlined in 44 CFR §206.48(b) for Individual Assistance.

44 CFR 206.48(b) states: "Federal Individual Assistance, if authorized, is intended to assist eligible individuals and families *when State, Tribal, and local government resources and assistance programs are overwhelmed*. State fiscal capacity (44 CFR 206.48(b)(1)(i)) and uninsured home and personal property losses (44 CFR 206.48(b)(2)) are the principal factors that FEMA will consider when evaluating the need for supplemental Federal assistance under the Individuals and Households Program but FEMA will always consider all relevant information submitted as part of a declaration request.

206.48(b)(1) "State fiscal capacity and resource availability. FEMA will evaluate the availability of State resources, and where appropriate, *any extraordinary circumstances that contributed to the absence of sufficient resources*. (B) Cumulative effect of recent disasters. *The cumulative effect of recent disasters may affect the availability of State, Tribal, local government, NGO, and private sector disaster recovery resources.*"

FEMA Fact Sheet: Declaration Process, dated June 13, 2018 states: "It is important to note that *there is no statutory threshold for an Individual Assistance declaration*. Despite what you may have heard, there is no "magic number" of homes destroyed that triggers an IA declaration. *The biggest factor*

when determining the need for either Public or Individual Assistance is whether or not the state and local jurisdictions have the resources available to meet the recovery needs.”

While the number of homes and levels of damage to businesses and residences from the Magna Earthquake may have been considered manageable at the state and local level under normal circumstances, the unprecedented financial, economic, and social impacts of the COVID-19 pandemic have created extraordinary circumstances and depleted government and voluntary agency resources; such that they are overwhelmed and unable to respond in the capacity required to assist local residents in recovering from the earthquake disaster.

Damaged Residences & Businesses

Salt Lake County has experienced the majority of earthquake damages to businesses, infrastructure, homes and personal property. Salt Lake City, Magna Township, West Valley City, and Herriman City, being closest to the epicenter of the earthquake, were hardest hit and declared states of emergency due to the earthquake, although impacts were felt broadly throughout the entire affected region.

Magna Township, the city located closest to the epicenter of the earthquake, experienced significant damage to its Historic Main Street and many unreinforced masonry homes in ‘Old Magna’. Historic Main Street was shut down for three days while officials conducted building damage assessment following the earthquake. Over 20 businesses along Main Street were damaged, several with damage significant enough to prevent them from being used. Many business owners are unable to afford the needed repair costs due to business and revenue losses from previous shutdowns from COVID-19. Historic Magna Main Street is an Opportunity Zone (OZ), as designated by the community development program established by Congress in the Tax Cut and Jobs Act of 2017, and is important to township revenues and the local community. Magna Township has made the repair and maintenance of Historic Main Street an important priority and is working with Preservation Utah and the SHPO to investigate all funding options for recovery and repair.

A 229-unit mobile home park in West Valley City had 46 mobile home units knocked off their foundations and deemed uninhabitable, with significant utility damage and disconnection. Due to COVID-19, displaced residents were hesitant to utilize initial Red Cross shelters, which were later shut down for non-congregate options. The homes of family and friends that would normally be viewed as temporary shelter options were not utilized by many residents due to social distancing restrictions and concerns over acquiring or transmitting COVID-19 to family members. City officials and Habitat for Humanity staff had concerns and reports about displaced residents sleeping in their cars.

With normal sheltering options limited, West Valley City made repairing and recertifying homes for occupancy a priority. They partnered with Habitat for Humanity to assess damages and make a plan for repairs. Due to staff and funding restrictions with Habitat for Humanity, and the specialized construction work, West Valley engaged a specialized contractor to assist with lifting and resetting the units back on their foundations. To date West Valley has spent at least \$301,000 to lift and stabilize 42 of the 46 units, with 7 units currently recertified for occupancy. The remaining reset units still require significant repairs and utility work before they can be inhabitable. Some may not be able to be fully repaired. An additional 35 units were rendered unstable but still on their foundations, and many other units sustained other damages, including gas line disconnections which displaced over 100 residents. Dominion Energy has restored gas service to most units.

Due to funding and resources limitations, West Valley prioritized resetting units that were off their foundations, but are very concerned about the other damaged units and their potential for collapse or

further displacement. They continue to work with voluntary agencies and other partners to identify further resources to assist affected residents with needed repairs.

Additional damaged residences are scattered throughout various neighborhoods in Salt Lake County, sustaining various levels and types of damage. Working within the limitations of COVID-19 pandemic restrictions, Salt Lake County, Davis County, and the Greater Salt Lake Municipal Services District (MSD) set up online surveys for residents to self-report damages to their homes, in addition to windshield surveys and inspectors conducted assessments. These surveys resulted in 938 residential and 148 commercial buildings being reported. State and local officials are concerned there may be unreported damages, as concerns and fears related to COVID-19 may have kept many residents from reporting.

On March 18, FEMA Headquarters and Region VIII used their Hazus modeling software to provide an initial assessment of the likely damage from the earthquake. Based on the location and magnitude of the earthquake, it was estimated in the Hazus summary \$629 million in total economic losses, including \$603 million in Salt Lake County. \$62 million is related to structural building damage with the remainder mostly consisting of non-structural and content losses. Results estimate 18,627 damaged structures, 15,773 affected, 2,686 minor, 165 major, and 3 destroyed. Estimated 109K tons of debris (53K tons of brick, wood and 56K tons of concrete and steel).

A virtual preliminary damage assessment was conducted jointly by the State of Utah and FEMA Region VIII staff to verify local residential damage reports. Initial IA damage reports collected by local jurisdictions through April 22 resulted in residential damage categories of 1 destroyed, 14 major, 66 severe, 101 moderate, 72 minor, 113 minor-none, 40 affected, 14 no damage, and 508 with no specific damage category assigned. The virtual joint assessment resulted in verification of: 2 destroyed, 172 with major damage, 404 with minor damage, and 51 affected homes, per FEMA's Damage Assessment Matrix requirements. Reports of damaged homes are expected to continue for several weeks to months as new damages are discovered or reported, or as COVID-19 restrictions ease and residents begin to seek assistance with repairs.

*Summary Data for IA Damage Assessments
(compiled as of April 22, 2020)*

FEMA State Joint PDA Verification					
FEMA	SLC	MSD	West Valley	Davis County	Historic
No Damage 127	61	53	9	4	
Affected 51	40	9	1	1	
Minor 404	72	247	28	6	51
Major 172	14	109	45	2	2
Destroyed 2	1	1			
Total 755	188	419	84	13	53

Utah Local IA PDA Reports - Summary					
Salt Lake County Self Survey, MSD Self Survey, & MSD Rapid Assessment					
Totals	Type	Totals	Type	Totals	Type
938	Residential (total)	148	Commercial (total)	1088	Total Structures
1	Destroyed	0	Destroyed	557	Owner (total)
14	Major	4	Major	57	Renter (total)
66	Severe	1	Severe	418	No Owner/Renter Data
101	Moderate	14	Moderate	56	Insured (total)
72	Minor	13	Minor	355	Not Insured (total)
113	Minor-None	26	Minor-None	203	Unsure Insur (total)
40	Affected	4	Affected	418	No Insurance Data
14	None	4	None		
508	No Category	81	No Category	2	No Data

**Detail reports and assistance estimates are included in attachment A - Individual Assistance.*

Special Populations

The hardest hit areas include unreinforced masonry homes in “Old” Magna and mobile home parks in West Valley City, neighborhoods which consist of lower income/socio-economic status households, many within the 30-50% AMI range. A large portion of homes are family owned rentals and multi-generational inherited homes. Many do not have homeowners insurance and earthquake coverage is limited to non-existent. Only 1 in 10 Magna residents both live and work in Magna, with the majority commuting into cities such as Salt Lake for work. With COVID-19 shutdowns and travel restrictions in place over the last few months has left Magna residents currently under or unemployed.

Many affected residents in Magna, West Valley City, and Salt Lake City with damaged homes are financially fragile and lack the capability to absorb unexpected costs above their normal living expenses, regardless of the federal or state damage definitions. Even residents whose income normally falls above the thresholds for assistance from voluntary agencies such as Habitat for Humanity have damages above their capability to afford, and many are now struggling financially due to COVID-19 record high unemployment rates and economic impacts. As a result, many vulnerable residents will be unable to make permanent repairs.

The housing situation is complicated by the COVID-19 pandemic conditions and pre-pandemic housing shortage. Job loss and an inability to afford both mortgages, repairs, and rent/hotel fees for temporary housing has created a crisis for many residents with earthquake damaged homes. Families are staying with relatives, friends, or in hotels, and there are unconfirmed reports that residents may be staying in their damaged homes because of COVID-19 fears related to other housing options. These forms of temporary housing are historically short-lived, and many of these families will soon require additional alternate housing assistance.

The loss of Magna Main Street also has a significant impact on Magna City's short and long term revenues, and contributes to the reduction of the city's ability to assist in recovery. Historic Magna Main Street is an Opportunity Zone (OZ), as designated by the community development program established by Congress in the Tax Cut and Jobs Act of 2017 to encourage long-term investments in low-income and urban communities nationwide. The program designation is designed to spur economic development and job creation in distressed communities. The loss of revenues to businesses from COVID-19 shutdowns prior to the earthquake and their continued closure after, combined with a lack of earthquake insurance, makes it nearly impossible for businesses along Historic Magna Main Street to afford repairs to their structures or to reopen.

Voluntary Agency Assistance

Over 120 people were displaced when their homes were deemed uninhabitable due to earthquake damage. The Red Cross initially established an evacuation center at Taylorsville High School but closed it within 36 hours due to COVID-19 social distancing concerns in favor of non-congregate sheltering solutions. Non-congregate sheltering was implemented in coordination with Salt Lake County in compliance with COVID-19 safety concerns. Peak sheltering included over 30 people. Currently, counties and non-profit organizations are assisting displaced families as best they can with interim housing since the Red Cross' temporary housing ended on March 25.

On March 18, Red Cross provided mass care resource support (cots, blankets, comfort kits) to 40 international travelers at the Salt Lake International Airport who missed connections or had flight cancellations due to decreased airport operations. The Red Cross also provided mass care resource support (cots, blankets, comfort kits) to The Rescue Mission of Salt Lake, which had 140 displaced residents due to building damage. The Mission's operation was relocated to the Mary Jensen Recreation Center. Red Cross, with support of VOAD partners, served 1,013 meals and snacks and distributed 48 comfort kits and 510 emergency supply items to individuals impacted by the earthquake. On March 25th the Salvation Army took over providing meals to displaced people.

Habitat for Humanity has worked closely with West Valley City on the coordination of resetting and repairing 46 mobile homes that were knocked off their foundations and 35 additional mobile homes that are unstable, as outlined in the Damaged Homes section. They have also received requests from Magna Township and other cities to assist with home repairs from the earthquake. Due to COVID-19 restrictions and shutdowns, Habitat for Humanity's ability to provide their traditional services have been greatly reduced. Difficulty in providing training in pandemic conditions, a significant percentage of their volunteer and worker population being high risk, and the loss of revenue from shuttering their ReStores - leading to a need to seek loans and payroll protection services themselves - has impacted the capacity of their resources. While they were able to provide administrative support and assistance to West Valley in the intake, assessment, and organization of the mobile home park damages and repairs, they were unable to participate directly in the construction work. While their administrative staff are working in a limited capacity from home, all Habitat for Humanity programs, services, and stores are closed until at least June of 2020.

These voluntary agencies have done an outstanding job addressing the immediate needs of affected residents as best they can. However, these requests for assistance have continued and increased since the earthquake, concurrent with the needs of those impacted by COVID-19. Our local voluntary organizations have a shortage of trained volunteers, many with their numbers reduced due to high risk volunteers unable to work or train. In person service programs have been restricted, and income generating activities such as fundraisers or sales have been cancelled. Some voluntary agencies have themselves had to apply for loans or other financial aid to maintain their payrolls and keep from shuttering their services. Their capacity to serve the earthquake impacted residents has been

restricted even within the populations they are mission bound to serve, and many affected residents fall outside of their threshold criteria for service.

While our voluntary agencies have done and continue to do amazing work and support our residents in times of need, there is still a significant gap in services, strain on resources, and a need for supplemental assistance.

Disruption to Normal Community Functions

Prior to the Magna earthquake, the COVID-19 pandemic had not only disrupted normal daily functions, but had abruptly and possibly permanently changed the way of life for most residents of Utah. It is very difficult to identify and separate the disruptions from COVID-19 from the disruptions from the earthquake. The closing of schools due to earthquake damaged facilities were preempted by COVID-19 school closures. Businesses that are damaged were previously shuttered by COVID-19 shutdowns. Local government resources are strained and tax revenues and budgets are depleted. Voluntary organizations are restricted and suffering, just as the populations they serve.

COVID-19 has disrupted daily life and community functions in such a way that normal disaster response and recovery efforts, and assessments of damages and disaster impacts, cannot be conducted in traditional and expected ways. Clean lines between the pandemic and concurrent disaster events do not exist. Everything must be reconsidered and adapted. In an already heightened environment of stress and anxiety, the initial earthquake and continued aftershocks, combined with the ongoing and ever evolving COVID-19 response and the expected delays and shortages in the transition to recovery; has left residents and responders in a heightened emergency response mode marked by constant stress and uncertainty.

Trauma

Residents, businesses, voluntary agencies, and all levels of government within the earthquake affected areas were impacted by this event, a second disaster within an already existing traumatic pandemic event.

As discussed above in the disruption of normal community functions, fear, anxiety, and stress related to the earthquake is exponentially compounded due to preexisting and continuing conditions related to the COVID-19 pandemic. Television, radio, and print media continuously highlight the ongoing COVID-19 crisis. There are concerns that the needs of residents impacted by the earthquake and information and resources relevant to earthquake recovery are being overshadowed by the COVID-19 response and media coverage. The emotional trauma from this earthquake is very real, if not always visible or prominent in the news.

Trauma will continue for those residents whose homes suffered damage beyond their ability to permanently repair. To date, conditions due to COVID-19 continue prioritizing stabilization over recovery, and reduce resources available for earthquake repair and recovery. Social distancing requirements continue to restrict communities' abilities to hold town halls or other public forums, where the concerns from residents and advisement on resources would normally take place. Restrictions also prevent individuals and families from accessing or relying on their normal support structures, or from accessing new services, many of which are currently prioritizing, or overwhelmed by, the needs of those affected by COVID-19.

Emergency management personnel, city personnel, and voluntary agencies have witnessed and continue to report many emotionally and mentally traumatized residents. Reports include fears of continued aftershocks or a larger earthquake, phantom aftershocks, insomnia and disrupted sleep in

adults and children (the earthquake and many aftershocks occurred late or early, while residents were still in bed), anxiety about entering or spending time basements or other perceived 'unsafe' locations (potential for being trapped if collapsed), heightened stress and jumpiness in response to loud noises or movements, etc. In an environment of shutdowns and social distancing, the earthquake has rendered many resident's last safe haven - home - a place of additional disaster fear and anxiety.

Public Health Impacts

Prior to the earthquake, the COVID-19 pandemic had already established a national and state-wide public health crisis, overwhelming normal public health responses, programs, and tools.

Though life-threatening injuries and deaths did not occur, the earthquake and aftershocks have caused and continue to contribute to serious physical and mental health concerns. Mental/behavioral health needs remain elevated and are expected to rise in affected areas with aftershocks and a slow recovery timeline. City officials, emergency managers, mental health professionals, and others involved in the response and recovery efforts have been reporting high volumes of people experiencing acute mental health effects of fear, anxiety, and stress due to the earthquake.

These anxieties are compounded by COVID-19 fears and associated social distancing and isolation, high unemployment rates, economic loss, increased work and education loads at home, and many other associated pandemic factors. Stress and anxiety levels, including sleep disruption, depression, and other problems have been worsened by continued aftershocks, reports of earthquakes in neighboring states, an inability to afford home repairs, and concerns about the potential loss of home, and have contributed to and in increased need for mental health services.

With regards to mental and behavioral health services, these resources are significantly stretched thin, with many residents unable to find psychologists and/or clinics open or with the ability to take on new patients. For those clinics that are open, many have limited hours and/or two-to three-month waiting lists. New clients with earthquake-induced anxiety and other issues are competing with an increase in established clients wanting to be seen more frequently, and therapists with less capacity to schedule and meet with clients. Many state and federal programs initiated to respond to COVID-19 mental health issues are event specific, and so are not accessible to those seeking help due to the earthquake, an unmet need and gap in services.

Economic Impacts

The impact of the earthquake on the local economy has not yet been fully evaluated. The losses created by this disaster are not limited to homes and possession, or to the directly affected communities. Jobs and businesses are also being threatened as key industries are experiencing significant impacts not only from the earthquake event, but from the COVID-19 pandemic.

The earthquake happened at a very inopportune time economically. Since mid-March at least 150,000 Utahns and 30 million Americans have filed jobless claims due to COVID-19 restrictions and job losses. As it has nationally, the five-week surge in jobless claims in the State of Utah has slowed since the week ending April 4, when they leapt above 33,000, but weekly filings are still at least three times higher than at any other time in state history.

Calculated TTR, GDP, and per capita income numbers may not accurately reflect the current economic state of residents, local governments, or state resource capacity, as they have been greatly impacted by COVID-19 shutdowns and response efforts. Economic and budgetary impacts of COVID-19 on the State of Utah are preliminary at this point, and it will still be several weeks before point estimates and budget numbers are available. The Utah Revenue Assumptions Working Group's

(RAWG) Economic Indicators for Utah and the United States: April 2020 report shows taxable sales going down by \$8 billion from 2019 to 2020 - just one example indicator of the economic losses impacting state budgets and resources.

State and local governments are taking actions to reduce spending and cut costs as a result of the expense of responding to COVID-19 and the related tax revenue losses from reduced tourism and public/industrial shutdowns; staff layoffs, hiring freezes, program cancellations, benefit reductions, and tight restrictions in travel and other spending are being implemented for an indefinite period. Voluntary agencies are experiencing reductions in donations and other income, as their fundraising events are cancelled and income generating programs are closed or restricted. Some voluntary organizations have themselves had to apply for loans or outside assistance to meet their payroll and program needs.

With the impacts to public buildings, private residences, and businesses from this earthquake, which happened during the peak of the COVID-19 pandemic response and associated economic crisis, economic recovery from the earthquake without assistance from supplemental federal IA programs is questionable at best.

Private Insurance

Preliminary Damage Assessments illustrate that while many residents have basic homeowner's insurance, a very low percentage of residents have specific earthquake insurance coverage on their homes. In addition, the earthquake and seismic shaking may have caused settling, loss of porosity and permeability, and other uninsurable non-visible damage to wells, septic tanks, and leach fields.

While detailed data is not yet available, a reasonable assumption is that while many residents may have homeowners insurance, they do not have specific coverage for earthquake damages. Earthquake insurance typically costs over \$1,000 per year and contains substantial deductibles ranging from 10 to 20 percent depending on the carrier, location, and value of the home. For example, average home prices in the area hardest hit by the earthquake range from \$260,000 to over \$300,000. These homes would have a deductible of \$26,000 - \$30,000; a substantial amount of non-covered loss for most low-income residents before insurance proceeds. Even if only minor damage was discovered, the average cost for a home inspection to rule out the necessity for an insurance claim is \$360.

Many who are financially capable and have insurance are being told the damages from the earthquake are not an insurable loss, or that their deductible amounts are currently beyond their means, especially with the current COVID-19 economic situation and associated business closures and unemployment rates. Those who are financially fragile, and most in need of assistance from outside sources, are the least likely to have insurance coverage.

Conclusion

I have determined this incident is of such severity and magnitude that effective recovery is beyond the capabilities of the State and affected local governments. Supplementary federal assistance is needed. I specifically request individual and public assistance and statewide hazard mitigation grants for eligible applicants within Salt Lake and Tooele Counties.

I certify the State of Utah will assume all applicable non-federal shares of costs required by the Stafford Act. The estimate for damaged infrastructure is \$18,132,889. These costs exceed the minimum statewide per capita threshold required by the Stafford Act of \$4,228,744 calculated by multiplying 2,763,885 Utah residents (2010 Census) by the Fiscal Year 2020 per capita indicator of \$1.53.

Utah has a strong culture of preparedness, and has taken steps to procure and maintain strong insurance policies, but insurance does not cover all the costs associated with recovering from an earthquake. A majority of the \$70 million in reported public damages will be covered, but at least \$18.1 million of uninsured damages remains. Utah needs assistance to prepare for the next event to include mitigation costs as we rebuild public schools and buildings that are not allowed these costs under insurance. Mitigation costs are a significant gap and important funding resource that Utah will need access to - not only to recover well but to increase resilience for the next earthquake event.

We still do not know the full extent of damage from the earthquake and following aftershocks. Two months after the initial earthquake, we are still getting new damage reports along with updated damage assessments as engineers and repair crews are able to fully examine the damage.

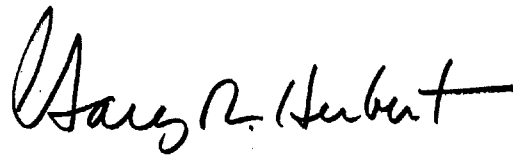
Given the devastating effects of this disaster, compounded by the COVID-19 Pandemic, I request the number of federal recovery personnel be appropriate to the size and needs of each community while meeting COVID-19 social distancing safety measures.

Finally, if a federal disaster declaration for Individual Assistance is denied for one or more jurisdictions affected by this earthquake, I request an Agency Declaration from the Small Business Administration. These requests are critical to the recovery of individuals and businesses and are beyond our State capability.

I believe the impacts of this disaster, combined with the extraordinary circumstances and devastating state-wide effects of the concurrent COVID-19 pandemic, compels an expedited review of this Request for Federal Assistance and timely consideration of the provided information. I therefore request you declare a Major Disaster for the State of Utah to include the full suite of Individual and Public Assistance, and Hazard Mitigation programs.

I have designated Division of Emergency Management Director Kris J. Hamlet as the State Coordinating Officer for this request. He will coordinate with FEMA and may provide further information or justification on my behalf.

Sincerely,

A handwritten signature in black ink, reading "Gary R. Herbert". The signature is fluid and cursive, with a long horizontal stroke at the end.

Gary R. Herbert
Governor

Enclosures

- Form 010-0-13 Request for Presidential Disaster Declaration
- A - Individual Assistance
- B - Public Assistance
- E - Hazus Estimated Damage and Economic Losses, March 18, 2020
- F - Earthquake Engineering Research Institute (EERI) "Virtual Earthquake Reconnaissance Team (VERT)"
- G - Utah State Historic Preservation Office (SHPO) Report on Historic Building Damage
- H - State of Utah Revenue Assumptions Working Group (RAWG) Economic Indicators for Utah and the United States: April 2020 report
- I - Manga Earthquake Sequence End Date